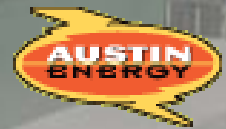


# ***RBJ Fuel Cell Tour***

**DER ROADSHOW**

**Presented by: Larry Alford  
Manager, Distributed Generation**



**May 30, 2003**

# ***RBJ Health Center Fuel Cell***



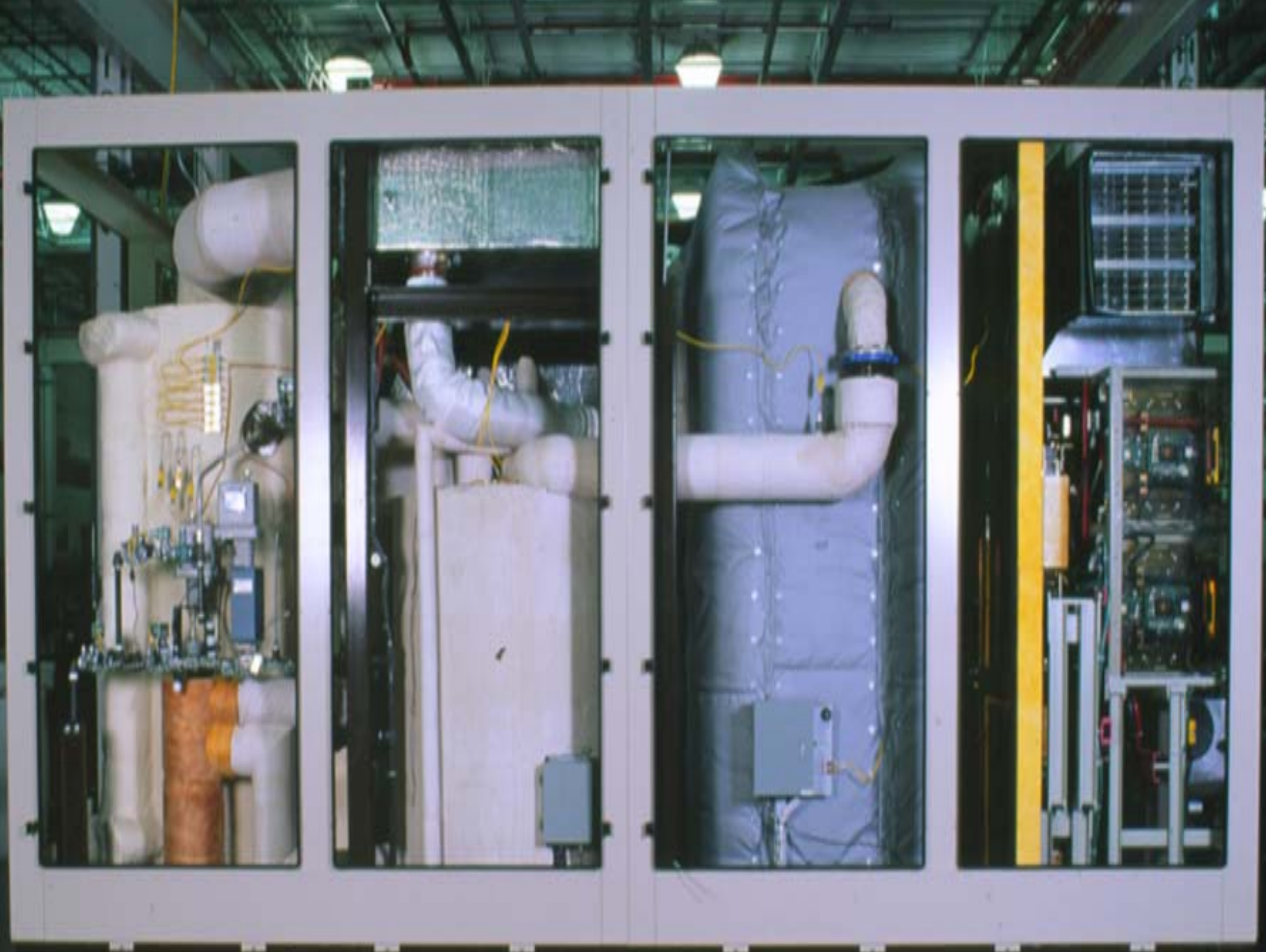
# ***Austin Energy--RBJ Health Center Fuel Cell Project***

- United Technologies Corporation (UTC)  
200kW Phosphoric Acid Fuel Cell
- Total Installed Cost \$1.2M
- DOD Climate Change Program Grant  
(\$200,000)

# ***Austin Energy--RBJ Health Center Fuel Cell Project***

- First commercial fuel cell feeding the local utility grid in Texas
- Demonstrate benefits of fuel cell from utility and customer perspective
- Learn what issues are important and how to overcome challenges





Courtesy of UTC Fuel Cells

# ***Rebekah Baines Johnson Health Center Fuel Cell***



## Characteristics

Indoor/Outdoor Installation  
Grid Connected/Grid Independent  
Automatic, Unattended Operation  
Remote Monitoring, Control & Diagnostics  
Direct Connection to City Gas Line  
Wide Range of Operating Temperatures  
(-30 degrees F – 110 degrees F)

## Performance

Power Output	200 kilowatts
Heat Available	900,000 Btu/HR
Electric Efficiency	34%
Overall Energy Efficiency*	87%
Negligible Air Emissions	
Extremely Quiet Operation	

\*possible with available waste heat

# RBJ Health Center Fuel Cell Performance for First Six Months

- Total MWH 858
- Total BTU 1.5 Million
- Electrical Efficiency 34%
- Total Efficiency (CHP) 55%
- Availability Factor 99.57%
- Capacity Factor 98.1%





1,000,000 BTU/HR Boilers

100 Gallon Water Heater  
&  
Circulating Water Pump





# ***RBJ Health Center***



***15 Waller Street***

***Austin, Texas***

***Contact Larry Alford – 512-322-6228***

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